

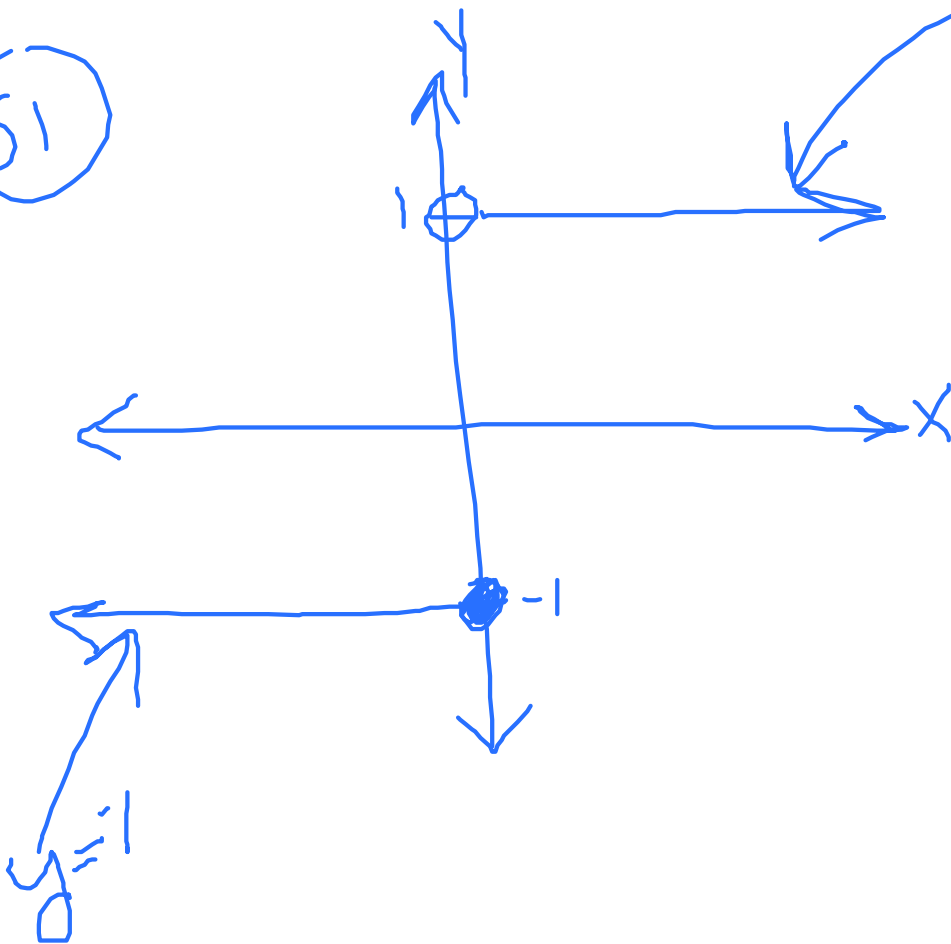
Unit 12

Day 5

Basic Functions

Section 3.5 from textbook

(51)



$$f(x) = \begin{cases} -1 & x \leq 0 \\ 1 & x > 0 \end{cases}$$

$$\textcircled{52} \quad f(x) = \begin{cases} 1 & x < 0 \\ 0 & x = 0 \\ 1 & x > 0 \end{cases}$$

# GREATEST INTEGER FUNCTION

The greatest integer function,  $f(x) = \llbracket x \rrbracket$ , pairs every real number  $x$  with the greatest integer that is less than or equal to  $x$ .

Examples:

$$\llbracket 8.4 \rrbracket = 8$$

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$$\llbracket \pi \rrbracket = 3$$

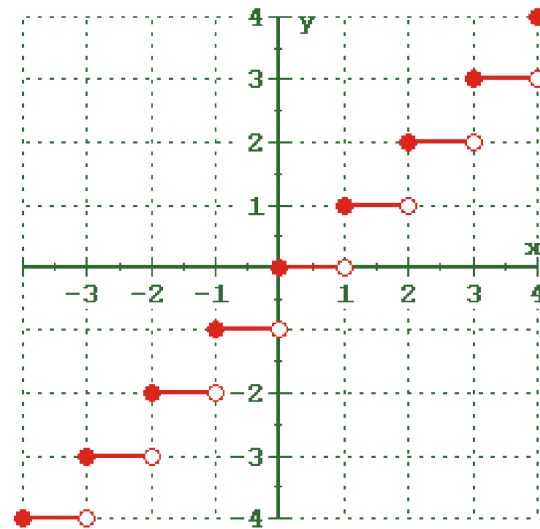
$$\llbracket \pi \rrbracket = 3$$

$$\llbracket -5 \rrbracket = -5$$

$$\llbracket -1.2 \rrbracket = -2$$

$$\llbracket -6.9 \rrbracket = -7$$

The graph of the greatest integer function looks like this:



Complete Basic Graphs Worksheets at seats.

Link to [grapher.app](#) for

Library of Functions

If time do a table of value problem from p 231



## HOMEWORK:

Complete worksheets from class

p. 230-231: 7-14 (all)

16-30 (e) use a table of values